Intercrete® 4822

Pore Filler & Screed

FORMERLY FLEXCRETE MONOLEVEL FC

PRODUCT DESCRIPTION

A single component, water-based (VOC-free), polymer modified, fibre reinforced cementitious repair mortar with high adhesive properties, allowing it to be used as a thin screed or filler to provide a fair -faced finish. It cures to provide enhanced freeze/thaw resistance and protection from the ingress of water, acid gases and chlorides. It is supplied as a single component system requiring only the addition of clean water.

INTENDED USES

Designed as a cosmetic quality fairing coat and thin screed render for filling minor blow holes, surface imperfections and levelling concrete surfaces to provide a fair faced finish.

Suitable for repair methods 3.1, 3.3, 7.1, 7.2 as defined in BS EN 1504-3. CE-marked in accordance with BS EN 1504-3, Class R2.

PRACTICAL INFORMATION FOR INTERCRETE 4822

Volume Solids	100% (based on wet film thickness applied being equal to dry film thickness)
Density	1900kg/m^3 (119lb/ft^3)
Typical Thickness	Up to a maximum of 6mm (0.24 inches) dry. Can be feather-edged.
Practical Coverage	On prepared surfaces, a 25kg pack will cover approximately 15.5m^2 at 1mm thickness.
Method of Application	Palette knife, Trowel, Spray, Bag-rub
Shelf Life	12 months at 20°C (68°F).
Pack Size	25kg packs
Working Pot Life	20°C (68°F) 30 minutes

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating interval with self *Minimum*	*Maximum*
20°C (68°F)	5 hours	7 hours	Not applicable	Not applicable

COMPLIANCE AND CERTIFICATION

When used as part of an approved scheme, this material has the following certification:

- CE-marked in accordance with BS EN 1504-3, Class R2.
  Suitable for repair methods 3.1, 7.1, 7.2 as defined in BS EN 1504-3.

- Compliant with Highways Agency Standard BD27/86 for the repair of Highway Structures

- Compliant with LU Standard 1-085 ‘Fire Safety Performance of Materials’.

CE 2797

SPECIFICATION CLAUSE

The fairing coat shall be a single component, thixotropic, polymer modified, cementitious repair mortar with high adhesive properties. It shall be CE-marked in accordance with BS EN 1504-3 Class R2, and shall comply with the following performance specification:

- Suitable for use on both horizontal and vertical surfaces without the need for a primer.
- Suitable for use as an exposed external finish without further protection or coating.
- Compressive strength at 20ºC (68ºF) of at least 20MPa in 1 day and 51MPa in 28 days.

SURFACE PREPARATION

Concrete

Concrete should have a minimum strength of 20MPa. All surfaces should be clean and free from laitance, curing compounds, release agents, efflorescence, grease, oil, dirt, organic growth, old coatings and loose or disintegrating concrete. Smooth surfaces should be roughened, using high pressure water jetting or similar techniques. The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water.

Steel Reinforcement

All exposed steel reinforcement should be treated with 2 x 1mm (40 mils) coats of Intercrete 4871, applied by brush (see relevant Product Data Sheet for full details). Note; when carrying out repairs in new construction, it is not necessary to fully expose any reinforcing bars.

APPLICATION

Mixing

Intercrete 4822 should be mechanically mixed using a forced action pan mixer or in a clean drum using a drill and paddle. A normal concrete mixer is NOT suitable.

For normal applications, typically use between 3.0 - 4.0 litres of clean water per 25kg bag. For part bags, use 5 - 6.5 volumes of powder to one volume of water. Normal mixing time depends upon the type of mixer used; 2-3 minutes is average. Mix so as to entrain as little air as possible. Use without delay.

Airless Spray

Suitable

Trowel

Recommended

Work Stoppages / Clean Up

Clean all equipment immediately after use with clean water. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

PRODUCT CHARACTERISTICS

Concrete

Do not use Intercrete 4822 when the temperature is below 5ºC (41ºF) and falling.

Placing

Intercrete 4822 can be applied to localised minor voids and surface defects using a palette knife. For large areas of pore filling, work well into the prepared substrate using a wooden float or 'bag-rubbing' techniques.

When used as a fair-faced finish, Intercrete 4822 should be applied to the prepared substrate using a steel float to provide a smooth polymer-rich surface finish. An initial thin layer should be worked well into the surface to fill blow holes and minor defects prior to building up the thickness to a maximum of 6mm (240 mils). Alternatively, spray techniques can be used.

Once the last layer has stabilised (2-6 hours, dependent on temperature), trowel marks can be removed using a wooden float or damp sponge to produce a surface comparable to emery paper, which provides an excellent finish for the subsequent application of a surface coating. A high quality is easily achieved with a steel float.

Curing

Particular attention should be paid to adequate curing with thin screed applications of Intercrete 4822. It is important that the surface of the mortar is protected from strong sunlight and drying winds with Intercrete 4870, polythene sheeting, damp hessian or similar (see separate Data Sheet for full details)

CE mark applies to products manufactured at Tomlinson Road, Leyland, PR25 2DY England, under reference 2797-CPR-530942.

APPLICATION TIPS

- During early mixing, the material appears dry. DO NOT add extra water at this stage, as full mixing produces a smooth consistency.
- DO NOT wet out or prime between layers.
- If the mortar thickens, remix but DO NOT add extra water.
- Do not over-trowel when applied as a fairing coat, otherwise blisters could form in the material, which must be removed.
- Remove trowel marks using a wooden float or damp sponge once the surface has stabilized.
- Can be overcoated with Intercrete membranes to give a coloured aesthetic finish.
- Cold Weather Working (See separate Guide): ≥3°C (37ºF) on a rising thermometer, ≥5°C (41ºF) on a falling thermometer.
- Hot Weather Working (See separate Guide): Store material in cool conditions to maximise working life. Shade applied material from strong sunlight. Spray-apply a second coat of Intercrete 4870. If possible, avoid extreme temperatures by working at night.

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TECHNICAL DATA / MECHANICAL CHARACTERISTICS

Standard and Property	BS EN 1504-2 Requirement	Result
EN 12190 Compressive Strength	>=15 MPa @28days	28 days: 53 MPa
BS4551 Compressive Strength Development @ 20°C		1 day : 20 MPa 7 days: 39 MPa 28 days: 51 MPa
EN 1542 Adhesive Bond (concrete)	>= 0.80 MPa	3.25 MPa Class R4 >= 2.0 MPa
EN 1015-17 Chloride Ion Content	<= 0.05%	<= 0.05%
EN 13057 Capillary Absorption	<= 0.5 $kg/m^{-2}/h^{-05}$	0.047 $kg/m^{-2}/h^{-05}$
EN 13687-1 Freeze/Thaw Cycling	>= 0.80 MPa	2.86 MPa Class R4 >= 2.0 MPa
EN196-1 Flexural Strength		10.74 MPa
BS EN 12617-4 Shrinkage		0.052% after 7 days
EN 13501-1 Reaction to Fire	Euroclass	Euroclass A2 – s1, d0

Note: The properties given above are obtained from laboratory tests: results obtained from on-site testing may vary according to site conditions.

SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

Important Note

www.international-pc.com